## A Firm's First Year

Jaap H. Abbring\* Jeffrey R. Campbell<sup>†</sup>

December, 2005

## Abstract

This paper determines the structural shocks that shape a firm's first year by estimating a structural model of firm growth, learning, and survival using monthly sales histories from 305 Texas bars. We find that heterogeneity in firms' pre-entry scale decisions accounts for about 40% of their sales' variance; persistent post-entry shocks account for most of the remainder. We find no evidence of entrepreneurial learning. Variation of the firms' fixed costs consistent with an annual lease cycle explains their exit rates. We use the estimated model to price a new bar's option to exit, which accounts for 124% of its value.

Keywords: firm exit, option value, fixed costs, Bayesian learning

JEL codes: C34, D83, L11, L83

We gratefully acknowledge the research support of the National Science Foundation through grant #013748 to the NBER. Jaap Abbring's research is supported by a fellowship of the Royal Netherlands Academy of Arts and Sciences and was in parts carried out at The University of Chicago, University College London, and the Institute for Fiscal Studies. We would also like to thank Gadi Barlevy and numerous seminar participants for comments, and the IZA in Bonn for facilitating a joint visit in December 2001. Ronni Pavan and Raghu Suryanarayanan provided superlative research assistance.

<sup>\*</sup>Department of Economics, Free University, De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands, and Tinbergen Institute. Email: jabbring@econ.vu.nl.

 $<sup>^\</sup>dagger Federal$ Reserve Bank of Chicago, 230 South La<br/>Salle Street, Chicago IL 60604, USA and NBER. Email: jcampbell@frbchi.org